

The sandwich problem for almost monotone properties

Celina Figueiredo (UFRJ), Maria Chudnovsky (Princeton), Sophie Spirkl (Princeton)

Resumo/Abstract:

We consider the graph sandwich problem and introduce almost monotone properties, for which the sandwich problem can be reduced to the recognition problem. We show that the property of containing a graph in C as an induced subgraph is almost monotone if C is the set of thetas, the set of pyramids, or the set of prisms and thetas. Moreover, we show that the imperfect graph sandwich problem, also known as the Berge trigraph recognition problem, can be solved in polynomial time.